

Canon's LCOS Projectors:  
Exceptional Color. Intricate Detail.

REALiS

SX6  
SX60  
X600



**Canon**  
*image*ANYWARE



# The Difference is in The Details

Canon's REALiS brand projectors feature LCOS (liquid crystal on silicon) technology, recently described by a leading trade magazine as "sort of a 'best of breed' combination of LCD and DLP technologies." LCOS technology produces lattice-free seamless images, and unlike LCD has no "screen door effect" to mute color and detail. LCOS technology has been highly coveted for providing extremely crisp images, intricate details,

easy-to-read type (as small as 7 pt.) and "HD images that jump out at the viewer in breathtaking quality," making it the ideal projector for demanding uses and applications. These include medical image presentations, display of CAD engineering drawings and blueprints, faithful color reproduction of professional photography, as well as countless uses for business, higher education and government.

## REALiS LCOS Projectors vs. Transmissive LCD Projectors

The surface area of each pixel in Transmissive LCD projectors is small, creating an overall grid-like lattice effect ("screen door effect"), which results in muted colors and text that appears faint and uneven. REALiS LCOS projectors have minimal gaps between the pixels, creating color-rich, detailed images, and text that appears dark and crisp. The advantages are easy to see:

### LCOS vs. DLP

LCOS Technology displays even subtle color gradation and tones of black and grey, which enhance visual accuracy, while DLP has a limited grey scale.



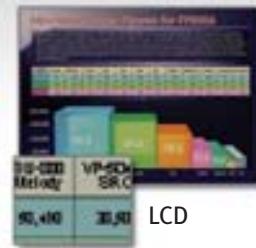
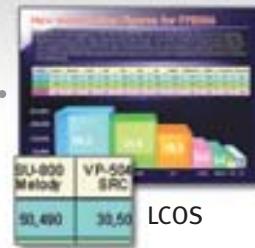
### Display of Fine Lines

Display of fine lines: CAD images, blueprints, and fine lines are reproduced smoothly and accurately with REALiS high-resolution projectors.



### Display of Color and Detail

REALiS SXGA+ models can be presented with exceptional color and intricate detail.



### Display of Small Text

By using more pixels for each letter, REALiS projectors can display easy-to-read type, as small as 7 pt. often illegible on LCD-based XGA projectors.



### Display of Fine Grained Objects

REALiS lattice-free images ensures smooth, crisp displays of fine grained objects, including metallic surfaces, typically dulled by LCD projectors.

# Canon's LCOS Projectors: What's Behind "Color So Real?"

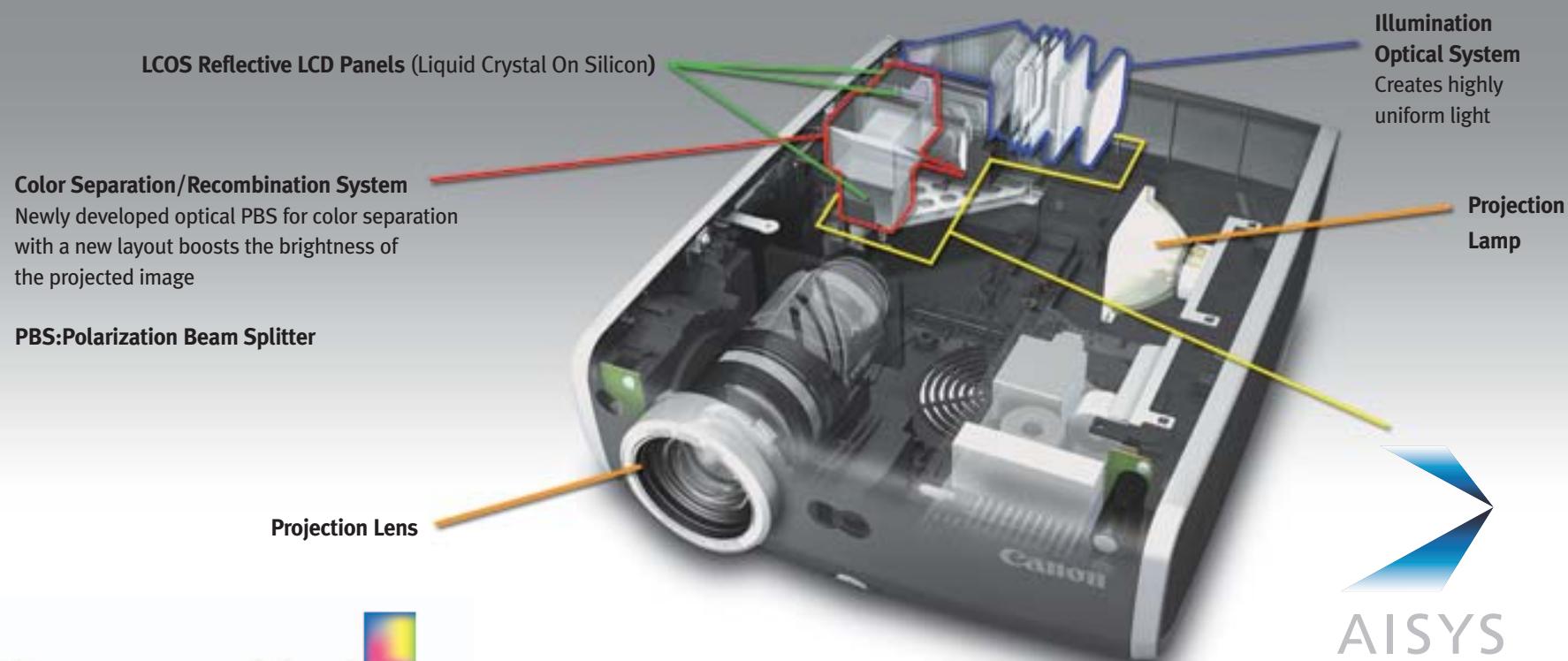
## The Secret is AISYS-Enhanced LCOS Technology

Canon's proprietary AISYS optical system enhances LCOS technology to achieve crisp, color-rich, intricately-detailed images by efficiently utilizing and equalizing light from the projector lamp. This unique technology effectively boosts the performance functions of brightness and contrast to optimize image quality, in a more compact housing that

maximizes affordability. New Optical elements were incorporated into the illumination optical system to enhance uniformity of light. The Polarizing Beam Splitters (PBS) in the color separation and recombination system were redesigned for more precise light control resulting in a new standard in bright, beautiful, high-contrast projected images.

### Advantages of the AISYS Optical System

- Seamless image
- High Contrast
- Compact Size
- High Definition
- Accurate Color Reproduction
- Brightness



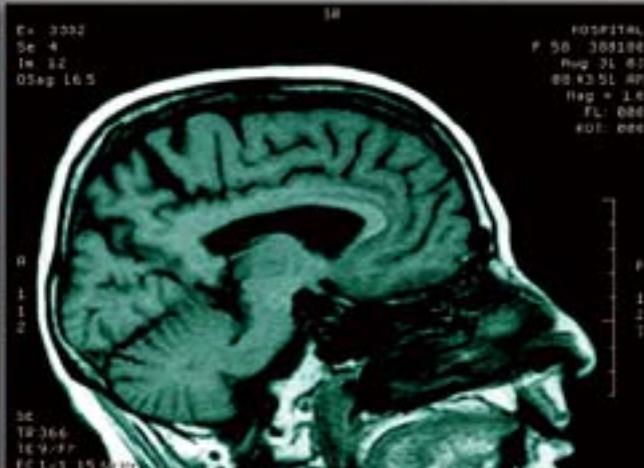
**REALiS**

**AISYS**  
Aspectual Illumination  
System

## Professional Photography



## Medical Imaging



## Engineering Design



## Higher Education



## Government



## Business



**For Applications that Require Precise Color and Detail ...**

# ...REALiS Projectors Continue to Impress.



## REALiS SX6



- SXGA+ (1400x1050)
- LCOS and AISYS Improved
- 1.7x Powered Zoom Lens
- 3500 ANSI Lumens
- 1000:1 Contrast Ratio
- Adobe RGB Color Match System
- Auto Set-up
- Screen Aspect Modes
- HDCP Compliant

## REALiS SX60



- SXGA+ (1400x1050)
- LCOS and AISYS Improved
- 1.7x Powered Zoom Lens
- 2500 ANSI Lumens
- 1000:1/2000:1 Contrast Ratio
- Home Cinema Mode
- Auto Set-up
- Screen Aspect Modes
- HDCP Compliant

## REALiS X600



- XGA (1024x768)
- LCOS and AISYS Improved
- 1.7x Powered Zoom Lens
- 3500 ANSI Lumens
- 1000:1 Contrast Ratio
- Auto Set-up
- Screen Aspect Modes
- HDCP Compliant

## Unique Website Lets You Compare Quality

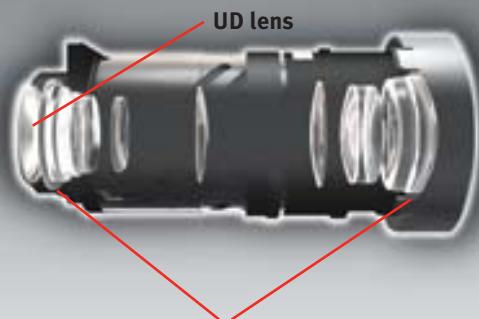
Visit "Where Are The Details," [www.usa.canon.com/details](http://www.usa.canon.com/details).

- REALiS TECHNOLOGY: Discover the many REALiS features with our 360 degree interactive presentation. View specs on each product.
- WHO NEEDS REALiS?: A market-specific drop-down menu lets you discover why REALiS is ideal for your particular application.
- REALiS ADVANTAGE: Read about and see a video which explains AISYS, Canon's proprietary technology that enhances LCOS technology.
- COMPARE RESOLUTION: Compare XGA, SXGA+ and REALiS SXGA+ with LCOS by market, in single frame and side-by side interactive screens.



# The REALiS Advantage

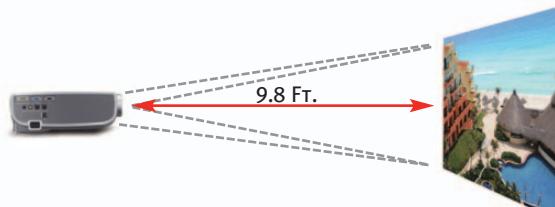
Canon's three new LCOS Multimedia Projectors, the REALiS SX6, REALiS SX60, and REALiS X600 join the award-winning REALiS SX50 to create an impressive line-up of high and super-high (SXGA+) resolution projectors. Whether it's medical and engineering professionals displaying intricately detailed, color-rich images; professional photographers or graphic artists needing to precisely match Adobe RGB color; business people or educators presenting charts and images in stunning detail; government or security users requiring exacting imagery; or even discerning home theatre enthusiasts, Canon's new REALiS Multimedia Projector line provides the features and performance to meet their needs.



Two high-precision double-sided aspherical lenses

## Throw Distance

The 1.7x Ultra-Wide Powered Zoom Lens has the widest zoom range of any of Canon's projector lenses, giving you a diagonal screen size range of 40" (at a very short distance of 3.9') to 100" at 9.8' and up to 300" maximum. (See chart page 11.)



Placement for projection on a 100-inch screen.



## Auto Set-up



Press Auto Set, and within seconds your input source is connected, distortion corrected, focus sharpened and color balanced.



Input Signal	Digital PC	DVI-I
	Digital Video	DVI-I
	Analog PC	DVI-I, Mini D-sub 15
	Component	Mini D-sub 15
	SCART	Mini D-sub 15
	Video	RCA signal
	S-Video	Mini DIN4

## Auto Keystone

Automatically calculates the angle of the projector and corrects for image distortion. Vertical ( $\pm 20^\circ$ ).

## Auto Focus

An infrared sensor on the front of the unit measures the distance to the screen and adjusts the focus in as quickly as one second.

## Auto Screen Color

Automatically adjusts the color balance according to the projection surface's color.

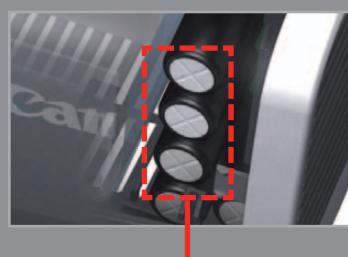
## Auto Input

Automatically detects the image signal from the input terminal, identifies it as the input signal and selects it for display.



## Off and Go

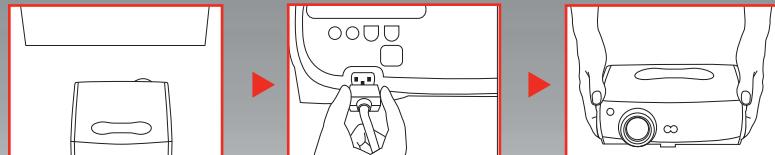
The SX6, SX60, and X600 models are equipped with an internal charging system to run the fan. This makes it possible to unplug the projector right after using it, while the internal charging system keeps the fan running.



Internal charging system for cooling fan.

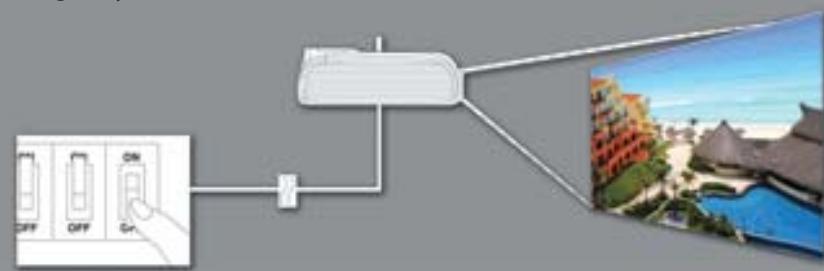


When presentation is finished, the unit can be unplugged immediately.



## Direct Power ON

The SX6, SX60 and X600 can be switched on and off from a central control terminal without actually pressing the buttons on the main unit, permitting remote operation when the projector is mounted overhead. It is also possible to control the power supply by simply connecting or disconnecting the power cable.



When Direct Power setting is 'On', the projector starts up automatically when power is supplied and is ready to display images in approx. 20 seconds.

# Feature-Rich Technology Engineered For Excellence.

Compatible with a variety of image input signals, including HDTV.

The SX6, SX60, and X600 models feature DVI-I and analog component HD input interfaces. In addition to SD signals from DVD players, these projectors can display high-definition digital video signals as large as 1080i.

- HDCP Compliant DVI-I terminal, Motion Adaptive IP conversion, and Film Mode (2-3 Pull down)

Monitor output

Analog RGB input/  
Component input

Digital RGB input/  
Analog RGB input (DVI-I)

Stereo audio input

Video input

S-Video terminal

Service port

USB port



## More Faithful Color: Special Color Filters for Adobe RGB and Home Cinema achieve Expanded Color Space

Sophisticated Canon color management technology, initially developed for digital cameras and printers, has been adapted for the new line of multimedia projectors. Proprietary color filters incorporated in the AISYS optical system expand the color space that can be displayed. The SX6 is fitted with a special RGB color filter that enables 100% support of sRGB and virtually accurate reproduction of Adobe RGB. The SX60 Cinema filter makes it possible to display the original colors of the film before conversion to a video signal.



## Home Cinema Mode

The SX60 multimedia projector is equipped with a home cinema filter making it ideal for this application.



## Crisp Blacks Create Rich Shadow Detail

Precise control prevents excess light leakage, producing rich, detailed gradation even in shadowed portions of projected images. And the crisp blacks produced by the LCOS reflective panels create images with realistic depth and dimension.



SX60



## Screen Aspect Modes

Now anyone who owns a 16:9 screen can enjoy the spectacular HD-like quality of Canon's REALiS projectors with our new Firmware that makes our SX6, SX60 and X600 behave like a native 16:9 projector.

### 16:9 Screen Aspect Mode

4:3 content



Watch 4:3 content on a 16:9 screen

16:9 content



Watch 16:9 content on a 16:9 screen

### 16:9 Digital Image Shift



Before Shift



Digital Image Shift UP



Digital Image Shift DOWN

## Dynamic Gamma

When dynamic gamma is 'on' gamma is automatically adjusted to optimum values. When projecting moving images with rapid shifts in brightness, each frame is displayed with optimum contrast balance to prevent washed-out whites and blocked-up blacks.

Advanced adjustment	
<input checked="" type="checkbox"/> Dynamic gamma	Off
<input checked="" type="checkbox"/> Mem. color correct	On
<input checked="" type="checkbox"/> 6-axis color adjust	Off
<input type="button"/> Return	



In bright scenes, gamma is adjusted according to the brightness, automatically compensating for washed-out areas and reproducing gradation in the bright sections.



In scenes containing dark areas, gamma is adjusted for the entire image, including dark sections, minimizing blocked-up shadows.



In scenes containing dark areas, gamma is adjusted for the entire image, including dark sections, minimizing blocked-up shadows.



In scenes containing dark areas, gamma is adjusted for the entire image, including dark sections, minimizing blocked-up shadows.



## Image Modes

Select the image mode to suit the characteristics of the content: "Presentation" mode for briefings and conferences, "Adobe RGB" or "sRGB" when color reproduction is critical, etc.

### Standard

Prioritizes reproduction of white, closely matching the image characteristics of the original

### Presentation

Produces a bright, high-contrast display for ease of viewing text and numerical data

### Movie

Suitable for displaying theatrical content; image quality emphasizes gradations in dark areas

### Movie & Photo

For display of video and digital camera images; clearly defines gradations and improves color reproduction

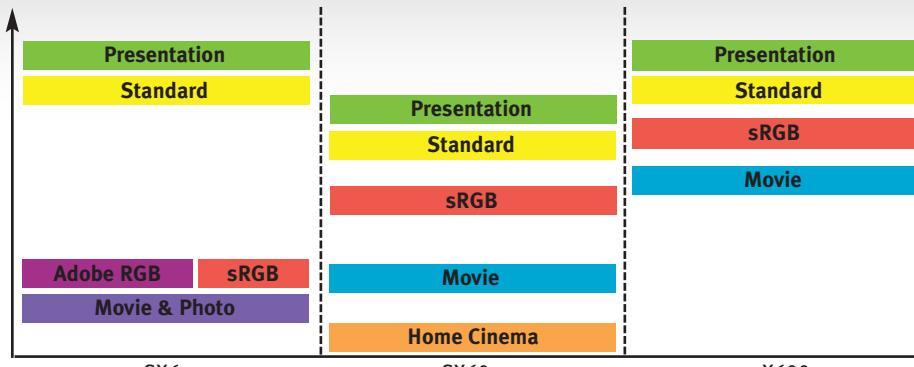
### Adobe RGB sRGB

Reproduces colors in the appropriate color space for accurate projection of content produced in specific standardized formats

### Home Cinema

Controls brightness while enhancing contrast to a ratio of 2000:1; for display of theatrical content in pitch-dark rooms

#### BRIGHTNESS



## 6-Axis Color Adjustments

A 6-Axis Color Adjustment function has been incorporated to meet the demands of professionals with demanding color requirements. Both hue and saturation can be adjusted on independent RGB and CMYK color axes.

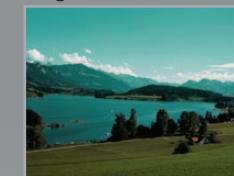
More orange in the sunset  
Original



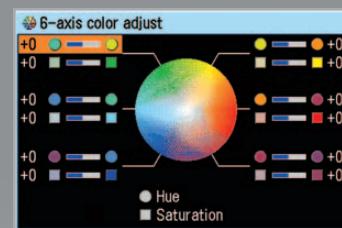
Adjusted



A bluer sky  
Original

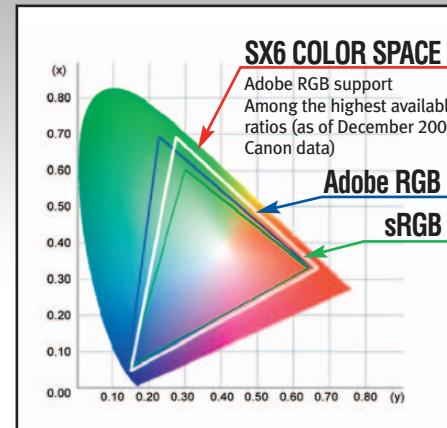


Adjusted



## Adobe RGB Color Match System

A special RGB color filter on the SX6 enables virtually accurate Adobe RGB color as well as sRGB, which is ideal for professional photography, design, publishing and printing. (SX6 only)



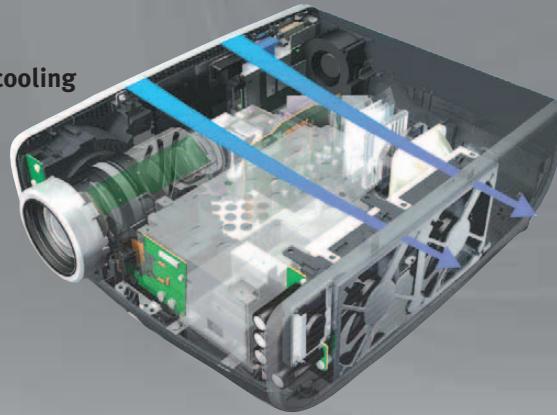
REALiS projectors produce scanless, grid-free images for realistic reproduction of colors and textures in photos.



## Quiet Operation

In a projector, heat is generated by its projection lamp and power-supply circuits. The cooling system required to dissipate this heat is one of the main reasons why projectors tend to be noisy. In the new SX6, SX60 and X600, ventilation vents, cooling fan, and layout of the optical array have been engineered with noise prevention in mind, resulting in exceptionally quiet operation.

- ▶ Vents designed for efficient cooling
- ▶ In-line layout for unobstructed ventilation
- ▶ Large fan operates at lower speed



## LED Illumination

LEDs on the SX6, SX60 and X600 indicate the projector's connections and operational status at a glance. When several image input devices are connected, a LED indicates which image signal is selected as the input. The LED illumination on the operation panel flashes to indicate start-up, end of presentation, and other user commands.

Input terminals



LED indicates connector responding to image signal.

Operations panel



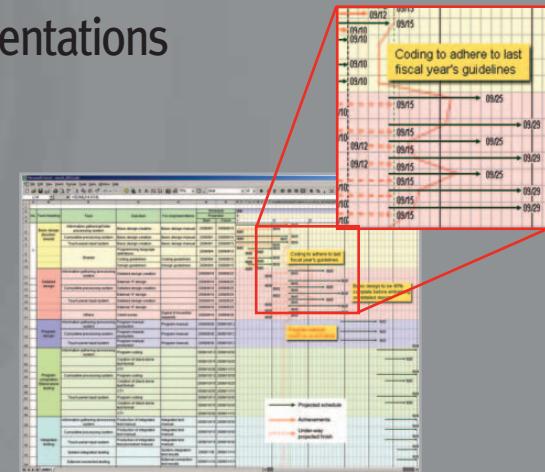
LEDs flash to indicate/confirm specific operations.

## Convenient Remote Control functions for sophisticated presentations

### Digital Zoom

Enlarges a selected single area of the screen, such as specific data in a graph; images can be enlarged a maximum of 12x\*.

\* Resolution of the enlarged section is reduced.



### Spot

Highlights a portion of the image on the screen; the spotlight can be made larger or smaller and moved anywhere on the screen.



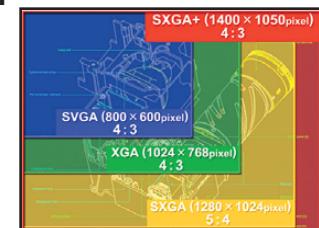
### Freeze

Freeze-frame function lets you freeze the on-screen display for pauses in the presentation, such as changing PC connections or checking the subsequent image file.



## Super-High (SXGA+) Resolution

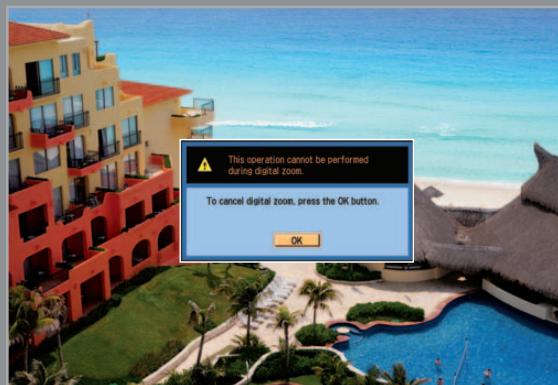
SXGA+ can project 3.1 times the display area of SVGA and 1.9 times the area of XGA to clearly display large amounts of detailed information, such as simultaneous projection of multiple PC windows (SX6, SX60).





## Guide Functions

The SX6, SX60 and X600 display guide messages in an on-screen window, providing feedback on invalid operations and set-up tips. The same window also introduces auto set-up and Off & Go functions when power is switched on or off.



## Canon Throw Distance Chart

### 4:3 Aspect Ratio

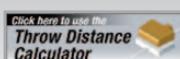
#### SX6, SX60, X600

Projector Screen Size	40"	80"	100"	150"	200"	300"
Screen Size – horizontally	2'8"	5'4"	6'8"	10'0"	13'4"	20'0"
Projection distance (shortest to longest)	3'11" – 6'5"	7'9" – 12'11"	9'8" – 16'2"	14'7" – 24'4"	19'6" – 29'6"	29'4" – 29'6"

### 16:9 Aspect Ratio

#### SX6, SX60, X600

Projector Screen Size	40"	80"	100"	150"	200"	300"
Screen Size – horizontally	2'11"	5'10"	7'3"	10'11"	14'6"	N/A
Projection distance (shortest to longest)	4'2" – 7'0"	8'5" – 14'1"	10'7" – 17'8"	15'11" – 26'6"	21'3" – 29'6"	N/A



For complete Throw Distance information, please visit [www.canonprojectors.com](http://www.canonprojectors.com)

## Kit Contents

### Remote Control



### Soft Case



### Computer Cable (DVI-VGA)



### USB Cable



### Component Video Adapter Cable



### Power Cord



## Select the Projector Right for Your Application

	SX6	SX60	X600
Markets			
Business	■		
Government	■	■	
Education	■		
Exhibits	■		
Trade Shows	■	■	
Hotels	■	■	
Retail	■	■	
Malls	■	■	■
Publishing	■		
Design			
Photography			
Medical		■	
CAD Engineering	■		
Structural Design		■	
Architecture	■	■	
Applications			
Presentations	■		
Seminars	■	■	
Displays	■	■	
Lectures	■	■	
Documentation	■	■	
Information	■	■	
Visual Artwork	■	■	
Color Matching	■		
Entertainment		■	
Home Cinema		■	

## Optional Accessories

### Replacement Lamp



RS-LP02 (SX6, X600)  
RS-LP03 (SX60)

### Ceiling Mount



RS-CL06 (SX6, SX60, X600)

### Ceiling Plate



RS-CL02

### Ceiling Pipe



RS-CL03 (14.17 in.)  
RS-CL04 (21.65 in.)  
RS-CL05 (29.92 in.)

### Network Adapter



RS-232C Cable RS-CA01  
RS-NA01

# Product Specifications

## Product

### REALiS SX6

### REALiS SX60

### REALiS X600

## TRIPLE P PROGRAM

### TRIPLE P

Canon's Projector Protection Program, also known as "Triple P," is a service program that provides a loaner projector of equal or greater quality in the event that your projector needs to be repaired.

- Free to any buyer within their first year of new product warranty
- Canon Customer Support Center** toll free hotline: 1-800-828-4040
- Customer Service Hours: 8 a.m. to Midnight, Monday to Friday  
10 a.m. to 8 p.m., Saturday
- For next business day delivery of loaner, Customer Activation Form must be received by **Canon Customer Support Center** by 3 p.m. EST (Monday to Friday)
- Customer must provide a valid credit card as security for the loaner unit
- Delivery not available on Saturday and Sunday
- Program available for products purchased and utilized in the U.S.A. only
- Applies to Canon SXGA+ and XGA resolution products only
- Loaner unit based on availability
- Program subject to change at any time without any given notice

**1-800-OK-CANON**  
[www.canonprojectors.com](http://www.canonprojectors.com)

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Miami, FL 33126, U.S.A.

'Systems Contractor News, October 2005 in  
REALiS SX60 review  
Errors and omissions excepted. Weight and  
dimensions are approximate. Specifications  
subject to change without notice. Projected  
images simulated.

**Canon**  
*imageANYWARE*

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Basics		REALiS SX6			REALiS SX60			REALiS X600								
Imaging Device		0.7" Reflective LCD panels (LCoS) x 3			4:3											
Aspect Ratio																
Native Resolution		SXGA+			SXGA+			XGA								
Brightness		3500 ANSI Lumens			2500 ANSI Lumens			3500 ANSI Lumens								
Uniformity		88%			88%			88%								
Contrast		1000:1			1000:1 2000:1 (Home Cinema Mode)			1000:1								
Optics	Keystone	Vertical Horizontal	+/- 20 degrees (Auto/Manual)			+/- 20 degrees (Manual)										
Projection Lens		F1.85 - 2.5, f=21.7 - 35.8 mm														
Lens Shift		9:1, Fixed														
Zoom		1.7x Powered , 12x Digital														
Focus		Powered (Auto/Manual)														
Screen Size		40" - 300"														
Projection Distance Coverage		3.9 - 29.5ft (1.2 - 9m) / 100": 9.8 - 16.1ft (3.0 - 4.9m)														
Throw Ratio		1.46 - 2.43:1														
Image Adjustments	Color Mode		Adobe RGB, sRGB, Presentation, Standard, Movie & Photo			sRGB, Presentation, Standard, Movie, Home Cinema			sRGB, Presentation, Standard, Movie							
	Color Adjust		Dynamic Gamma, 6-axis (RGBCMY) Color Adjustment													
	Wall Correction		Auto/Manual													
	Mounting		Ceiling/Rear/Ceiling and Rear													
Tilt Angle		Adjusting feet up to 10 degrees														
Input Signals	Analog PC Input		UXGA/SXGA+/WXGA/SXGA/XGA/SVGA/VGA													
	Digital PC Input		SXGA+/WXGA/SXGA/XGA SVGA/VGA			XGA/SVGA/VGA										
	Scanning Frequency		H:15 - 100 kHz, V: 50 - 100 Hz, Dot clock: 170 MHz													
	Video/S-Video Input		NTSC/PAL/SECAM/NTSC4.43/PAL-M/PAL-N													
	Component Input		1080i/1035i/720p/575p/480p/575i/480i													
	Digital Video Input		1080i/1035i/720p/575p/480p													
Terminals	Input	DVI-I 29pin		Digital PC input/Analog PC input/Digital Video input												
		Mini D-Sub 15pin		Analog PC input /Component input/SCART input												
		RCA x1		Video input												
		Mini DIN 4pin		S-Video input												
	Output	Stereo Mini Jack		Stereo audio input												
		Mini D-sub 15pin		Analog PC output												
		Built-In Speaker		1W (Mono)												
Control Terminal		RS-232C														
Network		YES (Optional Network Adapter)														
Lamp		Type		270W NSH		180W NSH		270W NSH								
Lamp Life (Quiet/Normal)		2000/1500 Hours		4000/2500 Hours		2000/1500 Hours										
Remote Control		Sensor		Wireless Infrared, Front/Back												
		Mouse Control		USB												
Ratings	Fan Noise (Normal/Quiet)		35/31 dB			30/27 dB			35/31 dB							
	Power	Consumption (Normal/Quiet/Stand-by)		355W/290W/7W			250W/225W/7W									
		Voltage		AC 100 to 240V, 50/60Hz												
	Temperature		41 to 95 F (5 to 35 C)													
	Storage		- 22 to 140 F (- 30 to 60 C), 5%RH-90%RH													
	Dimensions (W x D x H)		10.5 x 13.2 x 4.5 in. (266 x 336 x 114 mm)													
Weight		10.4 lbs (4.7 kg)			10.1 lbs (4.6 kg)			10.4 lbs (4.7 kg)								